RAW SEQUENCE LISTING PATENT APPLICATION US/08/978,636

DATE: 11/08/98 TIME: 17:42:48

INPUT SET: S29661.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

SEQUENCE LISTING

```
ENTERED
          General Information
   (1)
   (i)APPLICANT:ELAZAR RABBANI
    JANNIS G. STAVRIANOPOULOS
    JAMES J. DONEGAN
8
   DAKAI LIU
   NORMAN E. KELKER
   DEAN L. ENGELHARDT
10
    (ii)TITLE OF INVENTION: NOVEL PROPERTY EFFECTING
11
    AND/OR PROPERTY EXHIBITING COMPOSITIONS FOR
12
13
    THERAPEUTIC AND DIAGNOSTIC USE
14
15
    (iii) NUMBER OF SEQUENCES: 42
16
17
    (iv)CORRESPONDENCE ADDRESS:
18
     (A)ADDRESSEE:ENZO THERAPEUTICS, INC.
19
    (B)STREET:C/O ENZO BIOCHEM, INC.
20
     527 MADISON AVENUE,
21
     9TH FLOOR
22
     (C)CITY: NEW YORK
23
     (D)STATE:NY
24
     (E) COUNTRY: USA
25
     (F)ZIP:10022
 26
 27
     (V)COMPUTER READABLE FORM:
     (A)MEDIUM TYPE: 3.5" Micro Floppy Disk. 1.44 KB
 28
 29
     (B)COMPUTER: IBM PC/XT/AT, IBM PS/2 OR COMPATIBLES
 30
 31
      (C)OPERATING SYSTEM: PC-DOS
      (D)SOFTWARE: MICROSOFT WORD ___ - ASCII TEXT (DOS)
 32
 33
 34
      (vi)CURRENT APPLICATION DATA:
      (A)APPLICATION NUMBER: US 08/978,636
 35
 36
      (B) FILING DATE: 25-NOVEMBER-1997
 37
      (C)CLASSIFICATION: Not Yet Known
 38
     (Viii)ATTORNEY/AGENT INFORMATION:
 40
      (A) NAME: FEDUS, RONALD C.
 41
      (B) REGISTRATION NUMBER: 32,567
      (C)REFERENCE/DOCKET NUMBER:ENZ-53(D3)
  43
  44
     (ix)TELECOMUNICATION INFORMATION:
  45
      (A)TELEPHONE: (212) 583-0100
  46
```

RAW SEQUENCE LISTING PATENT APPLICATION US/08/978,636

DATE: 11/08/98 TIME: 17:42:50

```
(B)TELEFAX: (212) 583-0150
47
    (2) INFORMATION FOR SEQ ID NO:1:
48
49
    (i) SEQUENCE CHARACTERISTICS:
50
51
    (A) LENGTH: 20 amino acids
52
    (B) TYPE:amino acid
53
     (C) STRANDEDNESS:single
54
     (D) TOPOLOGY:linear
55
56
     (ii) MOLECULE TYPE: peptide
57
58
     (iii) HYPOTHETICAL: NO
59
     (ix) SEQUENCE DESCRIPTION: SEQ ID NO:1:
60
61
     Gly Phe Phe Gly Ala Ile Ala Gly Phe Leu Glu Gly Gly Trp Glu Gly
 62
                                                                                       15
 63
     1
 64
 65
     Met Ile Ala Gly
 66
         20
 67
 68
      (2) INFORMATION FOR SEQ ID NO:2:
 69
 70
 71
      (i) SEQUENCE CHARACTERISTICS:
 72
      (A) LENGTH: 20 base pairs
 73
      (B) TYPE:nucleic acid
 74
      (C) STRANDEDNESS: double
  75
      (D) TOPOLOGY:linear
  76
       (ii) MOLECULE TYPE: DNA (genomic)
  77
  78
  79
       (iii) HYPOTHETICAL: NO
  80
       (ix) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
  81
  82
  83
       TGCTCTCTAA GGGTCTACTC
                                   20
   84
   85
   86
       (2) INFORMATION FOR SEQ ID NO:3:
   87
   88
       (i) SEQUENCE CHARACTERISTICS:
   89
       (A) LENGTH:15 base pairs
   90
        (B) TYPE: nucleic acid
   91
        (C) STRANDEDNESS:double
   92
       (D) TOPOLOGY:linear
   93
       (ii) MOLECULE TYPE: DNA (genomic)
   94
   95
   96
        (iii) HYPOTHETICAL: NO
   97
        (ix) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
   98
    99
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RAW SEQUENCE LISTING PATENT APPLICATION US/08/978,636

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| 100 AATAT 15 | | | | |
|--|--|--|--|--|
| 101 CTCTAAGGTA AATAT 15 | | | | |
| 102 | | | | |
| 103 104 (2) INFORMATION FOR SEQ ID NO:4: | | | | |
| 104 (2) INFORMATION FOR SEQ 12 | | | | |
| 105 106 (i) SEQUENCE CHARACTERISTICS: | | | | |
| 106 (i) SEQUENCE CHARACTERIS | | | | |
| 106 (1) SEVERNETH: 16 base pairs 107 (A) LENGTH: 16 base pairs | | | | |
| 108 (B) TYPE: nucleic acid 109 (C) STRANDEDNESS: double | | | | |
| monor ogy • i i near | | | | |
| | | | | |
| 111 112 (ii) MOLECULE TYPE: DNA (genomic) | | | | |
| 0 | | | | |
| 113 114 (iii) HYPOTHETICAL: NO | | | | |
| | | | | |
| 115 116 (ix) SEQUENCE DESCRIPTION:SEQ ID NO:4: | | | | |
| 117 | | | | |
| 117 118 TGTATTTAG ATTCAA 16 | | | | |
| 119 | | | | |
| | | | | |
| 120 121 (2) INFORMATION FOR SEQ ID NO:5: | | | | |
| | | | | |
| CEOUENCE CHARACTERISTICS. | | | | |
| - / TENGTH: 19 Dase Palls | | | | |
| . = v munti-niicleic dulu | | | | |
| 100 (C) STRANDEDNESS: GOODIC | | | | |
| 127 (D) TOPOLOGY:linear | | | | |
| 128 129 (ii) MOLECULE TYPE: DNA (genomic) | | | | |
| | | | | |
| 130 131 (iii) HYPOTHETICAL: YES | | | | |
| | | | | |
| 132 133 (ix) SEQUENCE DESCRIPTION:SEQ ID NO:5: | | | | |
| 104 | | | | |
| 134 135 TGCTCTCTAA GGTAAATAT 19 | | | | |
| | | | | |
| 136 137 GEO TD NO:6: | | | | |
| 137 138 (2) INFORMATION FOR SEQ ID NO:6: | | | | |
| | | | | |
| CENTENCE CHARACTERISTICS. | | | | |
| TENGTH: 19 Dase Paris | | | | |
| . (a) /p) mypr:nucleic acid | | | | |
| (C) STRANDEDNESS: GOUDIE | | | | |
| 144 (D) TOPOLOGY:linear | | | | |
| 145 146 (ii) MOLECULE TYPE: DNA (genomic) | | | | |
| 146 (ii) MOLECULE TIPE. BMI (5 | | | | |
| 147 148 (iii) HYPOTHETICAL: YES | | | | |
| | | | | |
| 149 150 (ix) SEQUENCE DESCRIPTION:SEQ ID NO:6: | | | | |
| | | | | |
| 151 152 TGTATTTTAG GGTCTACTC 19 | | | | |
| 152 TGTATTTAG GGTCTTT | | | | |

RAW SEQUENCE LISTING PATENT APPLICATION US/08/978,636

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(2) INFORMATION FOR SEQ ID NO:7:
153
154
155
      (i) SEQUENCE CHARACTERISTICS:
156
      (A) LENGTH: 19 base pairs
157
      (B) TYPE: nucleic acid
158
      (C) STRANDEDNESS:single
159
      (D) TOPOLOGY:linear
160
161
      (ii) MOLECULE TYPE: mRNA
162
163
      (iii) HYPOTHETICAL: YES
164
      (ix) SEQUENCE DESCRIPTION: SEQ ID NO:7:
 165
 166
 167
                                    19
                    GGUAAAUAU
      UGCUCUCUAA
 168
 169
 170
       (2) INFORMATION FOR SEQ ID NO:8:
 171
 172
       (i) SEQUENCE CHARACTERISTICS:
 173
       (A) LENGTH: 19 base pairs
 174
       (B) TYPE: nucleic acid
 175
       (C) STRANDEDNESS: single
 176
       (D) TOPOLOGY:linear
 177
 178
       (ii) MOLECULE TYPE: mRNA
  179
  180
        (iii) HYPOTHETICAL: YES
  181
        (ix) SEQUENCE DESCRIPTION: SEQ ID NO:8:
  182
  183
  184
                                     19
                     GGUCUACUC
        UGUAUUUUAG
  185
  186
        (2) INFORMATION FOR SEQ ID NO:9:
  187
  188
  189
        (i) SEQUENCE CHARACTERISTICS:
  190
        (A) LENGTH:20 base pairs
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        (B) TYPE:nucleic acid
  192
        (C) STRANDEDNESS:single
   193
         (D) TOPOLOGY:linear
   194
   195
         (ii) MOLECULE TYPE: mRNA
   196
   197
         (iii) HYPOTHETICAL: YES
   198
         (ix) SEQUENCE DESCRIPTION: SEQ ID NO:9:
   199
   200
   201
                      GGGUCUACUC
         UGCUCUCUAA
   202
   203
    204
         (2) INFORMATION FOR SEQ ID NO:10:
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RAW SEQUENCE LISTING PATENT APPLICATION US/08/978,636

DATE: 11/08/98 TIME: 17:42:55

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206
     (i) SEQUENCE CHARACTERISTICS:
207
     (A) LENGTH: 49 base pairs
208
     (B) TYPE:nucleic acid
209
     (C) STRANDEDNESS:single
210
      (D) TOPOLOGY: linear
211
     (ii) MOLECULE TYPE: other nucleic acid
212
       (A) DESCRIPTION: /desc = "oligonucleotide"
213
214
215
     (iii) HYPOTHETICAL: YES
216
     (ix) SEQUENCE DESCRIPTION: SEQ ID NO:10:
217
218
                                             TGGACACGAT TAACATCGC
                                                                          49
                   TCGAGCTCTG ATCACCACCA
219
      GGAATTCGTC
220
221
      (2) INFORMATION FOR SEQ ID NO:11:
222
 223
 224
      (i) SEQUENCE CHARACTERISTICS:
 225
      (A) LENGTH:55 base pairs
 226
       (B) TYPE:nucleic acid
 227
      (C) STRANDEDNESS:single
 228
       (D) TOPOLOGY:linear
 229
       (ii) MOLECULE TYPE: other nucleic acid
 230
         (A) DESCRIPTION: /desc = "oligonucleotide"
 231
 232
 233
       (iii) HYPOTHETICAL: YES
  234
       (ix) SEQUENCE DESCRIPTION: SEQ ID NO:11:
  235
  236
                                                                                     55
                                                                         TAATC
                                                            TTAGCGATGT
                                 TTTTTGGAGG AGTGTCGTTC
  237
                    TCTCGTCTCT
       GACTAGTTGG
  238
  239
  240
       (2) INFORMATION FOR SEQ ID NO:12:
  241
  242
        (i) SEQUENCE CHARACTERISTICS:
  243
        (A) LENGTH: 46 base pairs
  244
        (B) TYPE: nucleic acid
  245
        (C) STRANDEDNESS:single
  246
        (D) TOPOLOGY:linear
  247
        (ii) MOLECULE TYPE: other nucleic acid
  248
        (A) DESCRIPTION: /desc = "oligonucleotide"
  249
   250
   251
        (iii) HYPOTHETICAL: YES
   252
        (ix) SEQUENCE DESCRIPTION: SEQ ID NO:12:
   253
   254
        GGAATTCGTC TCGGAGAAAG GTAAAATTCT CTGACATCGA ACTGGC
                                                                         46
   255
   256
   257
   258
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RAW SEQUENCE LISTING PATENT APPLICATION US/08/978,636

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***** PREVIOUSLY ERRORED SEQUENCES - EDITED *****

SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/08/978,636

DATE: 11/08/98 TIME: 17:42:58

INPUT SET: S29661.raw

Original Text

Line Error (C)CLASSIFICATION:Not Yet Known 38

.

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SEQUENCE MISSING ITEM REPORT PATENT APPLICATION US/08/978,636

DATE: 11/08/98 TIME: 17:42:58

INPUT SET: S29661.raw

APPLICATION NUMBER FILING DATE PRIOR APPLICATION DATA

SEQUENCE CORRECTION REPORT PATENT APPLICATION US/08/978,636

DATE: 11/08/98 TIME: 17:42:58

| Line 3 45 49 70 87 104 121 138 154 171 188 205 223 241 259 277 295 | Original Text (1) General Information (ix)TELECOMUNICATION INFORMATION: (2)INFORMATION FOR SEQ ID NO: 1 (3)INFORMATION FOR SEQ ID NO. 2: (4)INFORMATION FOR SEQ ID NO. 3: (5)INFORMATION FOR SEQ ID NO. 4: (6)INFORMATION FOR SEQ ID NO. 5: (7)INFORMATION FOR SEQ ID NO. 6: (8)INFORMATION FOR SEQ ID NO. 7: (9)INFORMATION FOR SEQ ID NO. 8: (10)INFORMATION FOR SEQ ID NO. 9: (11)INFORMATION FOR SEQ ID NO. 10: (12)INFORMATION FOR SEQ ID NO. 11: (13)INFORMATION FOR SEQ ID NO. 12: (14)INFORMATION FOR SEQ ID NO. 13: (15)INFORMATION FOR SEQ ID NO. 15: (16)INFORMATION FOR SEQ ID NO. 15: (17)INFORMATION FOR SEQ ID NO. 16: | (1) GENERAL INFORMATION: (ix) TELECOMMUNICATION INFORMATION: (2) INFORMATION FOR SEQ ID NO:1: (2) INFORMATION FOR SEQ ID NO:2: (2) INFORMATION FOR SEQ ID NO:3: (2) INFORMATION FOR SEQ ID NO:4: (2) INFORMATION FOR SEQ ID NO:5: (2) INFORMATION FOR SEQ ID NO:6: (2) INFORMATION FOR SEQ ID NO:7: (2) INFORMATION FOR SEQ ID NO:8: (2) INFORMATION FOR SEQ ID NO:9: (2) INFORMATION FOR SEQ ID NO:10: (2) INFORMATION FOR SEQ ID NO:11: (2) INFORMATION FOR SEQ ID NO:12: (2) INFORMATION FOR SEQ ID NO:13: (2) INFORMATION FOR SEQ ID NO:14: (2) INFORMATION FOR SEQ ID NO:15: (2) INFORMATION FOR SEQ ID NO:16: (2) INFORMATION FOR SEQ ID NO:17: |
|---|--|---|
| 330 348 | (17)INFORMATION FOR SEQ ID NO. 17: (18)INFORMATION FOR SEQ ID NO. 18: (19)INFORMATION FOR SEQ ID NO. 19: (20)INFORMATION FOR SEQ ID NO. 20: | (2) INFORMATION FOR SEQ ID NO:18: (2) INFORMATION FOR SEQ ID NO:19: (2) INFORMATION FOR SEQ ID NO:20: (2) INFORMATION FOR SEQ ID NO:21: |
| 367 | (20)INFORMATION FOR SEQ ID NO. 20: (21)INFORMATION FOR SEQ ID NO. 21: | |
| 384 | | |
| 403 | (22)INFORMATION FOR SEQ ID NO. 22: (23)INFORMATION FOR SEQ ID NO. 23: | |
| 420 | | |
| 439 | (24)INFORMATION FOR SEQ ID NO. 24: (25)INFORMATION FOR SEQ ID NO. 25: | |
| 459 479 | (25)INFORMATION FOR SEQ ID NO. 25: (26)INFORMATION FOR SEQ ID NO. 26: | (2) INFORMATION FOR SEQ ID NO:27: |
| 479 499 | (27)INFORMATION FOR SEQ ID NO. 27: | |
| 519 | (28)INFORMATION FOR SEQ ID NO. 28: | |
| 539 | | |
| 559 | | |
| 580 | | |
| 598 | | |
| 618 | | |
| 638 | | |
| 656 674 | | (2) INFORMATION FOR SEQ ID NO:37: |
| 674 694 | | (2) INFORMATION FOR SEQ ID NO:37: (2) INFORMATION FOR SEQ ID NO:38: (2) INFORMATION FOR SEQ ID NO:39: |
| 714 | | (2) INFORMATION FOR SEQ ID NO:39: (2) INFORMATION FOR SEQ ID NO:40: |
| 734 | (39)INFORMATION FOR SEQ ID NO. 39: | |
| 754 | (40)INFORMATION FOR SEQ ID NO. 40: | |
| 774 | | (2) INFORMATION FOR SEQ ID NO:42: |
| 794 | (42)INFORMATION FOR SEQ ID NO. 42: | (2) INPORMATION |
| 814 | (43)INFORMATION TOROSQ 3 | |

SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/08/978,636

DATE: 11/08/98 TIME: 17:43:00

INPUT SET: S29661.raw

Original Text Error Line

(C)CLASSIFICATION: Not Yet Known Wrong Classification 38

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PAGE: 1

SEQUENCE MISSING ITEM REPORT PATENT APPLICATION US/08/978,636

DATE: 11/08/98 TIME: 17:43:00

INPUT SET: S29661.raw

APPLICATION NUMBER FILING DATE PRIOR APPLICATION DATA

SEQUENCE CORRECTION REPORT PATENT APPLICATION US/08/978,636

DATE: 11/08/98 TIME: 17:43:00

| | | Corrected Text |
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| Line | Original Text | (1) GENERAL INFORMATION: |
| | (1) General Information | (1) GENERAL INFORMATION: (1x) TELECOMMUNICATION INFORMATION: |
| 3 | A TOTAL ECOMUNICATION INFORMATION | (2) INFORMATION FOR SEQ ID NO:1: |
| 45 | CONTRICTOR ATTOM FOR SECTION FOR | (2) INTECODINATION FOR SECTION 10.2. |
| 49 | OUNEODMATION FOR SEQ ID NO. 2. | (2. INTECOMINATION FOR SECTION POS. |
| 70 | COMEODMATION FOR SEU ID NO. 3. | AND THE ODMATION FOR SEU ID NO TO |
| 87 | ASSINEADMATION FOR SECTION NO. T. | AND THE ODMATION FOR SECTION 1999. |
| 104 | CONTEMPLATION FOR SECTION FOR | (2) INTECOMMATION FOR SECTIONS |
| 121 | ANIMEODMATION FOR SEQ ID NO. 0. | AND DIMATION FOR SECTION INC. |
| 138 154 | CONTRODUCTION FOR SECURDING. 1. | A TATEODMATION FOR SECTION ROW |
| 171 | CONTRACTOR FOR SECURDING. S. | A TATEODMATION FOR SECTION ROW |
| 188 | A DATE OF MATION FOR SECULD 119.71 | 5. TATEODMATION FOR SECURD 19912 |
| 205 | A LINEODMATION FOR SECTION INC. 191 | A TRIEDDMATION FOR SECTION PORTION |
| 223 | (12)INFORMATION FOR SEQ ID NO. 11: | A TATE OD MATION FOR SECTION PORTS. |
| 241 | (12)INFORMATION FOR SEQ ID NO. 12: (13)INFORMATION FOR SEQ ID NO. 13: | (2) INFORMATION FOR SEQ ID NO:13: (2) INFORMATION FOR SEQ ID NO:14: |
| 259 | (13)INFORMATION FOR SEQ ID NO. 13: (14)INFORMATION FOR SEQ ID NO. 14: (15)INFORMATION FOR SEQ ID NO. 15: | (2) INFORMATION FOR SEQ ID NO:14: (2) INFORMATION FOR SEQ ID NO:15: (2) INFORMATION FOR SEQ ID NO:16: |
| 277 | (15)INFORMATION FOR SEQ ID NO. 15: (16)INFORMATION FOR SEQ ID NO. 16: | (2) INFORMATION FOR SEQ ID NO:16: (2) INFORMATION FOR SEQ ID NO:17: |
| 295 | CANTENDALATION FOR SECULD 1991 191 | A TATEODMATION FOR SECURDING 11 |
| 312 | AND THE ODMATION FOR SEU ID 199. 17. | AS INTECONMENTATION FOR SECTION 1901101 |
| 330 | ANTAICADMATION FOR SECTION 10. 10. | 43. TATEODMATION FOR SECTION POSITION |
| 348 | COLDIFORMATION FOR SECULDING, 121 | A DICODMATION FOR SECTION ROLL |
| 367 | CONTROD MATION FOR SECTION 190, 201 | A TATEODMATION FOR SECURD 199121 |
| 384 | CONTRODINATION FUR SECURD 119: 21 | A DIEODMATION FOR SECTION 10:22. |
| 403 420 | CALIFORNIATION FOR SEX ID NO. 22. | 3. INFORMATION FOR SECTION 19:25. |
| 439 | A LINICODMATION FOR SECTION NO. 25. | AS INTECOMMATION FOR SECTION PORTS |
| 459 | ASSISTED MATION FOR SECTION FO | TATEODMATION FOR SEU ID 110,25. |
| 479 | CANDEODMATION FOR SECULD 119: 25: | A THEODMATION FOR SECTION 10:20. |
| 499 | (26)INFORMATION FOR SEQ ID NO. 26: (27)INFORMATION FOR SEQ ID NO. 27: | A INTEGRALATION FOR SECURD 1994 |
| 519 | (28)INFORMATION FOR SEQ ID NO. 27: (29)INFORMATION FOR SEQ ID NO. 28: (29)INFORMATION FOR SEQ ID NO. 29: | (2) INFORMATION FOR SEQ ID NO:28: (2) INFORMATION FOR SEQ ID NO:29: |
| 539 | (29)INFORMATION FOR SEQ ID NO. 29: (30)INFORMATION FOR SEQ ID NO. 30: | (2) INFORMATION FOR SEQ ID NO:29: (2) INFORMATION FOR SEQ ID NO:30: (2) INFORMATION FOR SEQ ID NO:31: |
| 559 | AND THE COMMATION FOR SECULDING, SO | (2) INFORMATION FOR SEQ ID NO:31: (2) INFORMATION FOR SEQ ID NO:32: |
| 580 | AND THE ODMATION FOR SECURD IN CO. ST. | 13) TATEODMATION FOR SECTION ROSE. |
| 598 | ANTICODMATION FOR SECTION ROSE. | 2. THEODMATION FOR SEX ID NO.22. |
| 618 | ANTICODMATION FOR SECTION 190, 221 | A THEODINATION FOR SECURD MOVEL |
| 638 | 25/17/15/DMATION FOR 3EQ 10 19/5/5/ | A TATEODMATICIN FURSION ID 1191991 |
| 656 | ACTION ATION FOR SECTION ROLLS | A INTECOMATION FOR SECURD IN CO. |
| 674 694 | AND THE COMMETTED BY SECTION FOR SECTION F | 12 INDODMATION FOR SECTION NO.311 |
| 714 | AND THE COMMANDIAN FOR SECURD 119 12 11 | AN INTECODINATION FOR SECURIORS |
| 734 | CONTRICION FOR SECURD MY SY' | STATEODMATION FOR SECTION 1999 |
| 754 | ANTECONIATION FOR SECURD 1997 | AN INCODMATION FOR SECTION NO. TO. |
| 774 | AUDITOR HOR SECTION FOR SECTION FOR | 2. INDODMATION FOR SEU ID NOVI |
| 794 | ASSECTION FOR SECTION POSTS | (2) INFORMATION FOR SEQ ID NO:42: |
| 814 | (42)INFORMATION FOR SEQ ID NO. 42: | |